

## About your new TP-Link TD-W9970 Modem

Your new TP-Link TD-W9970 modem has been pre-configured by NCF, so you can use it as soon as your DSL service is active. This document provides additional information for set-up and troubleshooting.

There are 3 cables supplied with your modem: 2 phone cables, and 1 Ethernet cable. You can tell them apart by their plugs: the phone cable has narrower plugs than the Ethernet cable.

For line with a voice-service: connect DSL filter/s to any phone line/s in your residence where you have a phone device (telephone, answering or fax machine). Plug the filter into a phone wall jack – and then the phone device into the filter. Dry loop doesn't need the filter. A phone wall jack can be shared between a phone device and a modem by using a splitter.

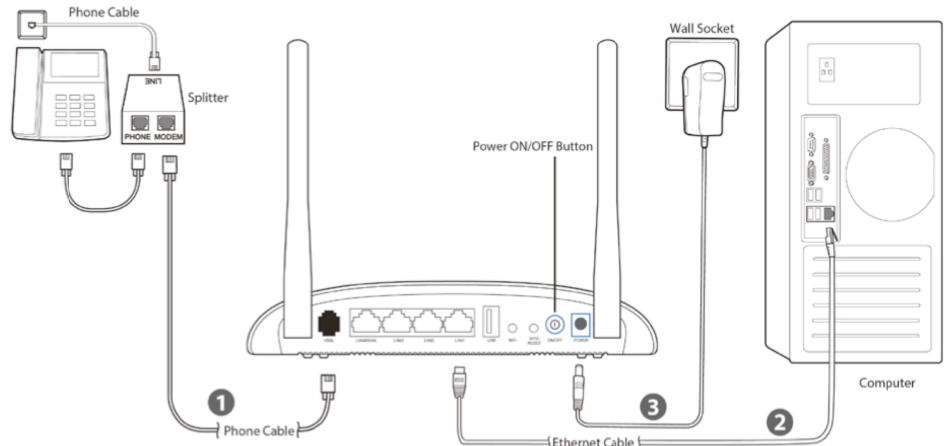
1. Plug one end of a phone cable into a phone wall jack (or splitter/filter, one is provided with each modem, if sharing the phone wall jack.) Plug the other end of the phone cable into the VDSL port on the modem

2. Connect the Ethernet cable to any of the LAN ports on your modem. Connect the other end of the cable to the Ethernet port on your PC

3. Plug the power adapter into a wall outlet and then into the back of your DSL modem. A power bar with a surge protector is always a good choice for this and other computer devices

4. Power-up the modem by pressing the Power ON/OFF button

5. Give the computer and modem a few minutes to finish their start-up processes. You should ultimately have a solid DSL light on the modem, and the Internet light should also be illuminated. At that point, you are likely ready to begin using the Internet.



You should have received a sheet from NCF that gives you your NCF **Member ID**, your **DSL Login** and your **DSL password**. These credentials are also in your “Welcome to DSL at NCF...” email from NCF, if you have access to your email already.

If you are using a separate router, you may need those credentials to set-up your router. In such a case, you likely ordered your TP-Link TD-W9970 modem in Bridge Mode.

If you plan on using a wireless connection, your Wi-Fi-capable device should be able to see a **Wi-Fi SSID** in the form **NCF\_XXXX**, where the X's are unique to your device, and could be letters and/or numbers.

Choose the **NCF\_XXXX** Wi-Fi SSID, and when asked for a “password” or “key” use the **Wi-Fi Password (= DSL Password)** you were given for your account.

It is normal for the Wi-Fi (WLAN), LAN and/or Internet lights to flash occasionally, showing data moving about.

**CAUTION: If you received a CD with your modem, DO NOT USE IT.** Your modem is pre-configured and there is no need for any additional software for your computer. We advise that you discard the CD.

**NEVER PRESS THE WPS/RESET BUTTON IN THE BACK OF THE MODEM** – doing so will reset the modem to factory defaults and you will have to re-configure the modem or bring the modem to NCF to have it re-configured.

## SUPPORT

We provide support for the service we offer: connecting to NCF DSL, email and getting your modem operational. Contact NCF support at 613-721-1773, press '0' or use the Office Message feature on the NCF website at [help.ncf.ca](mailto:help.ncf.ca)

We have a small group of staff and volunteers which limits our ability to help with your home networking issues or support your computer software and set-up issues.

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## DSL Troubleshooting Guide

Sometimes your DSL service can be interrupted or your initial activation might not occur smoothly. In the vast majority of cases, your DSL service will be activated quickly and operate smoothly. If you do have a problem, follow the steps below.

**NOTE:** Follow these instructions closely to determine where your problem resides. If Bell needs to make repairs to your inside wiring, there will be a charge that will be passed on to you, so it's important that you perform the full testing to avoid any charges.

**NEVER PRESS THE WPS/RESET BUTTON IN THE BACK OF THE MODEM** – doing so will reset the modem to factory defaults and you will have to re-configure the modem or bring the modem to NCF to have it re-configured.

1. Ensure you haven't put a filter on the line that goes into your modem. Filters are used to **REMOVE** the DSL signal from phone device/s so that they are not noisy. They will thus stop the DSL signal from reaching your modem
2. Ensure all phone device/s (telephone/s, answering or fax machine/s) have filters plugged into the phone wall jack, and then are themselves plugged into the filter. Not having filters will cause audible hissing on the voice line
3. Use only the phone cable that came with the modem (preferred to be less than 2 metres long)
4. Note the indicator lights that are showing on your modem. If there is no DSL light illuminated that means there is no DSL signal arriving at the modem. It takes up to 5 minutes for that light to illuminate after powering on the modem
5. If there is no DSL signal, try unplugging ALL phone device/s (telephone/s, answering or fax machine/s) and filters from your phone wall jacks, turn your modem off, wait 10 seconds, then turn your modem back on again. Wait 5 minutes and if there is still no DSL Signal, proceed to the next step
6. Check to see if there is a telephone jack at your home's **Demarcation Point**. This is the location inside your home where the Bell wires enter through the wall from outside. If there is a jack there, bring your modem to that Demarcation Point jack and see if the DSL light comes on. If your home's **Demarcation Point** is on an outside wall (common in new homes) or in a locked utility room (common in apartment buildings), contact NCF for assistance

If you still have no DSL signal, and the service was operational beforehand, please contact NCF via the support at 613-721-1773, press '0' OR email us at [office@ncf.ca](mailto:office@ncf.ca) so that we can help you by opening a Trouble Ticket with Bell.

Note that wiring **INSIDE** your home is your responsibility. The quality of in-home wiring varies greatly, particularly in older homes. Contractors can be found who will adjust, improve or repair your wiring. Search the Internet using terms such as “home networking wiring Ottawa”. If Bell needs to make repairs to your inside wiring, there will be a charge that will be passed on to you.

## Having Trouble With A Poor Wi-Fi Signal In Certain Areas Of Your Home?

1. Sometimes small movements of the antenna/s can aim the radio waves more suitably for reaching a device in a certain area of your home. Try various positions, but be gentle with the antenna/s as they can break
  2. Ensure that the modem is not sitting beside, or behind, any large metallic objects. Such an object, like a filing cabinet or large appliance, can shield radio waves from reaching the places where you wish to receive them
  3. Try moving the modem to a different location which is more central to your home, as long as there is a phone wall jack nearby
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## ACCESSING THE MODEM'S SET-UP INTERFACE (suitable for technically-inclined members)

You will normally not need to use the modem web interface which is presented on a web page within your modem. However, if you are comfortable with the technical details of networking and need to alter your modem configuration for some reason, these details will help you do so.

For problems with your modem or DSL service, see **How to get help**, described below.

You access the configured modem web interface with a web browser at <http://192.168.1.1> and then enter:

Username: **admin**

Password: **DSL Password** – information included in the box and in the “Welcome to High-Speed Internet...” email from NCF.

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## Steps to Re-configure a Modem, if Required!

**This process is suitable for members who are technically-inclined. Read through to understand the options.**

### Resetting your modem:

**WARNING:** Resetting your modem will reset the modem to the factory default and erase your configuration.

**NOTE:** if you wish to adjust your configuration in some way, such as changing a password, or changing to **Bridge Mode** to accommodate a separate router, you do NOT need to reset the unit before reconfiguring. Rather, log into your modem's web page at **192.168.1.1**, use the user name **admin** and your **DSL Password** for the password and make your changes. Otherwise...

1. Connect the modem directly to the computer via the Ethernet cable then power-up the modem
2. Once the modem finished the start-up process, press the **WPS/RESET** at the back of the modem
3. Hold the button pressed until the 3 lights (LAN, DSL, Internet) blink once, go off and come back
4. Start-up your computer and then you'll be able to access the modem with a web browser

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## Configuring Your Modem for VDSL Service

1. Open web browser and type **192.168.1.1** in the address bar. Press **Enter/Return**
2. Username: **admin**
3. Password: **admin** (remember, the modem was reset and lost your **DSL Password**!)

### Quick Setup - Start

4. Click on **Quick Start** (left-hand menu, 2<sup>nd</sup> link from top), click **Next**

### Quick Setup - Region and Time Zone

5. **Region:** Canada  
**Time Zone** to (GMT-05:00) Eastern Time (US & Canada), click **Next**

### Quick Setup – Auto Detection

6. Click on **No, I want...**, click **Next**

### Quick Setup – DSL

7. **ISP:** Other  
**L2 Interface Type:** VDSL  
**Enable VLAN ID:** checked  
**VLAN:** 35  
**Connection Type:** PPPoE, click **Next**

### Quick Setup - PPPoE

8. **User name:** ab123@ncf.ca (where ab123 is your NCF ID)

**Password:** ..... (where ..... is your NCF DSL Password)

**Confirm password:** ....., click **Next**

**Quick Setup – 3G/4G**

9. Click **Next**

**Quick Setup – Wireless**

10. **Wireless:** Enable

**Wireless Network Name (SSID):** NCF\_xxxx (where xxxx is your choice)

**Channel:** Auto

**Mode:** 11bgn mixed

**Security:** WPA/WPA2

**Password:** DSL Password, click **Next**

**Quick Setup – Confirm**

11. Verify all setting are as entered, click **Save**

**Quick Setup – Complete**

12. Click **Finish**

13. Stay logged-in and click **Network** (left-hand menu, 4<sup>th</sup> link from top), then **WAN Settings**

**Network – WAN Settings**

14. Click on **Action: Edit** (entry with **pppoe\_ptm\_xx\_x\_x**, right-hand side of table)

**Network – WAN Settings**

15. **WAN Service Setup**, enter...

**Enable IPv6:** un-select

Click **Advance**, select **SPI Firewall**

Click **Save**

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## Configuring Your Modem for ADSL Service

16. Stay logged-in and click **Network** (left-hand menu, 4<sup>th</sup> link from top), then **WAN Settings**

**Network – WAN Settings – DSL WAN Interface**

17. Click on **Action: Delete** (1<sup>st</sup> entry, right-hand side of table)

Click **Add** button

**Network – WAN Settings – WAN Settings**

18. **DSL Modulation Type:** select ADSL

19. **ATM Configuration**, enter...

**VPI:** 0

**VCI:** 35

20. **WAN Service Setup**, enter...

**Connection Type:** PPPoE

**User name:** ab123@ncf.ca (where ab123 is your NCF ID)

**Password:** ..... (where ..... is your NCF DSL Password)

**Confirm password:** .....

**Connection Mode:** select 'Always on'

**Authentication Type:** select AUTO\_AUTH

**Enable IPv4:** selected

**Default Gateway:** select 'Current Connection'

**Enable IPv6:** un-select

Click **Advance**, select **SPI Firewall**

Click **Save**

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## Additional Settings That Need to be Done

1. Click on **System Tools** (left-hand menu, towards the bottom)
2. Select **Manage Control**
3. For the user **admin** we use the member's **DSL Password** – user name & password should not exceed 15 characters
4. Ensure **ICMP (ping)** is set for **Local**
5. Enter it once and again below to confirm, click **Save**
6. Select **Time Settings**
7. **Time Zone: (GMT-05:00) Eastern Time (US & Canada)**
8. **NTP Server 1:** time.nrc.ca
9. **Enable DST:** checked
10. **Modify DST Start:** 2<sup>nd</sup> Sunday in March
11. **Modify DST End:** 1<sup>st</sup> Sunday in November
12. Click **Save**
13. **Guest Network - Basic Settings** – Ensure that Guest Network: Disable (default setting)
14. **Forwarding – UPnP** – Set **UPnP:** Disable
15. Click **Save**
16. **System Tools - Manage Control** – Ensure that **ICMP (Ping):** Local only (default setting)
17. **SystemToolsCWMPSettings**
  - Ensure the following settings: CWMP: Disable (default setting), Inform: Disable (default setting)

**NOTE:** if any of the above explanations is unclear, you should not attempt to configure your own modem. Simply contact or visit NCF and we can help you. Support is included in the cost of your service.

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## Configuring Your Modem in Bridge Mode

1. Open web browser and type **192.168.1.1** in the address bar. Press **Enter/Return**
2. Username: **admin**
3. Password: **admin** (or, if known, **DSL Password**)

### Quick Setup - Start

4. Click on **Quick Start** (left-hand menu, 2<sup>nd</sup> link from top), click **Next**

### Quick Setup - Region and Time Zone

**Region:** Canada

**Time Zone** to **(GMT-05:00) Eastern Time (US & Canada)**, click **Next**

### Quick Setup – Auto Detection

5. Click on **No, I want...**, click **Next**

### Quick Setup – DSL

6. **ISP:** Other
  - L2 Interface Type:** VDSL
  - Enable VLAN ID:** checked
  - VLAN:** 35
  - Connection Type:** Bridge, click **Next**

### Quick Setup – Wireless

7. **Wireless:** Disable
  - Click **Next**

### **Quick Setup – Confirm**

8. Verify all settings are as entered, click **Save**
9. Stay logged-in and click **Network** (left-hand menu, 4<sup>th</sup> link from top), then **WAN Settings**

### **Network – WAN Settings – WAN Settings**

10. **DSL Modulation Type:** select ADSL
11. **ATM Configuration**, enter...  
VPI: 0  
VCI: 35
12. **WAN Service Setup**, enter...  
Connection Type: Bridge  
Click **Save**

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### **Dial-Up Access/Email Setup Information**

As an NCF member you have an email account, space for a website, and access to our legacy dial-up.

If you still have access to a dial-up modem, you can access our dial-up service at 613-520-1135 or 613-366-0013

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### **NCF websites:**

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|---------------------|--|
| http://www.ncf.ca   | General information about NCF and for new registrations.   |
| http://start.ncf.ca | This is your personal NCF Start Page.<br>See web-based email access along the left side of this page.  |
| http://help.ncf.ca  | Includes our “Help” pages and “Office Message”<br>Office Message is a quick way to get answers.<br>Also, information on account, passwords, email Setup - Spam Filter, Email Aliases, Publishing your web page and Newsgroups.   |
| How to get help:    | <ul style="list-style-type: none"><li>- Online help at http://help.ncf.ca – Detailed how-to information.</li><li>- Help Desk discussion groups: Members help members solve problems</li><li>- Office Message. on your start page, it connects directly with the office</li><li>- If you can't get online, give us a call at 613-721-1773 and press '0' *</li><li>- You can email us at office@ncf.ca</li></ul> |

You can host your own web page on NCF servers. Your web address is: [http://web.ncf.ca/NCF\\_ID](http://web.ncf.ca/NCF_ID) (replace NCF\_ID with your ID). See more info on web hosting at: [http://www.ncf.ca/ncf/support/wiki/Publishing\\_Web\\_Pages](http://www.ncf.ca/ncf/support/wiki/Publishing_Web_Pages)

***\* About Voice Mail: if staff or volunteers are busy with assisting other members, our phone system will ask you to leave a message. Messages go directly into our trouble-ticket system and someone will get back to you.***

If you find any mistake/s in the above text or feel it could benefit from additional explanation/s, please send your comment/s to [office@ncf.ca](mailto:office@ncf.ca) – Thank You!